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MID-DECADE STRATEGIC REVIEW OF BEA'S ECONOMIC ACCOUNTS: AN UPDATE

In the February issue of the Survey of Current Business, BEA published, as part of its Mid-Decade Strategic Review, a draft plan for maintaining and improving the performance of its national, international, and regional accounts. This article provides an update; it summarizes comments on the draft plan, presents a plan refined on the basis of those comments, and outlines the first steps in implementing the plan.

The Users' Conference

On March 21, 1995, about 50 leading users of the economic accounts gathered to share their views on BEA's draft strategic plan. They were invited to comment on whether BEA had identified the issues correctly and had proposed the most effective steps to maintain and improve the accuracy, reliability, and relevance of the economic accounts over the coming decade.

After welcoming remarks by the President of the U.S. Chamber of Commerce, which hosted the meeting, and by the Secretary of Commerce, the Under Secretary of Commerce for Economic Affairs described the challenge of the statistical system as being similar to that of a tailor trying to measure a sprinting athlete for a suit of clothes; the statistical system not only must keep pace with a rapidly changing economy, and it must be twice as agile if it is to measure accurately. The Director of BEA introduced the draft strategic plan, which was structured around three major issues: The need for new and improved output measures; the need for better measures of investment, saving, and wealth; and the need to fill gaps in the coverage of international transactions.

The first three sessions of the conference focused on the major issues BEA had identified. (The agenda for the conference is reproduced in the box on page 00.) For each session, following an overview of the issues and proposed actions, a panel presented their views and reactions, and then the

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discussion was opened to all participants. A fourth session dealt with the challenge of improving statistics in a resource constrained world.

Overall, the participants agreed with the issues BEA had identified and the actions that BEA had proposed for the next several years. In some cases, participants urged more emphasis on an element of the plan than they thought BEA had given, and in a few cases suggested a different priority be given to an element. A summary of the views presented at the conference follows./1/

Session I: New and Improved Output Measures

Overall, participants endorsed, although with reservations by some, BEA's plan to feature a measure of real GDP that avoids substitution bias. The reservations stemmed from concern about not having real GDP measures in which the components add to the totals, as is the case with the measure, based on fixed weights, that is now featured. Participants urged BEA to open a broader discussion with users on alternative measures of real GDP as it moves forward and to begin briefings, with attention to users' analytical and forecasting needs, on the new index over the coming months.

BEA's quality-adjusted price indexes for computers, introduced in 1985, have caused some problems for some users, particularly modelers. However, most participants felt that BEA had made important progress when it introduced the hedonic measures and that now it needs to develop improved price/output measurement in other areas. There was some difference of opinions on the focus of these efforts. Among the views expressed were the following:

- BEA should move forward rapidly to develop improved price measures for high-tech products similar to those developed for computers. Telecommunications was mentioned.
- BEA should undertake further definitional and conceptual work on output measures and the closely related price measures. Health, finance, insurance were the specific areas mentioned.

1. A transcript of the meeting will be available this summer as part of a full Mid-Decade Review package.

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Other participants seemed to favor some intermediate course, but urged that BEA move forward. The possibility of working in partnership with business and academia was also mentioned.

One of the clear themes at this session was the need to update and fill gaps in coverage, particularly those in services. (This same theme was echoed by the Vice Chairman of the Federal Reserve Board in his talk at lunch.) Although some suggested that partnerships with the private sector and use of existing private data might moderate the necessary increase in respondent burden, there was a recognition that new surveys of services would probably be required.

Several participants stressed the need for a frequently updated industrial classification and for more timely and better integrated industry accounts.

Among the other output-related steps in which participants expressed an interest were the following: Improving seasonal adjustments for volatile components, and moving closer to the international guidelines, especially the recently revised System of National Accounts (SNA). In addition, charging more for BEA's information to help fund the economic accounts and establishing a regularized process for internal and external review of the accounts were mentioned.

Session II: Better Measures of Investment, Saving, and Wealth

Despite general recognition of the empirical and conceptual difficulties involved, there was consensus on the need for more comprehensive measures of investment. Participants placed an important emphasis on the adoption of the measures within the context and discipline of the SNA. In addition, for investments where the uncertainty, or error, is likely to be several orders of magnitude higher than that for estimates now in the accounts, participants thought the estimates should be put in satellite accounts with some indication of the degree of uncertainty associated with the estimates.

More specifically, the following points were made:

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- Government purchases of structures and equipment, computer software and selected other intangibles, and perhaps consumer durables (even though they are not treated as investment in the SNA) should be included in the main accounts.
- Other kinds of investments--such as natural resources, research and development (R&D), and education--should be put in satellite accounts.

Some participants called upon BEA to go beyond the SNA: The SNA was seen as a good first step in expanding and updating the accounts, but the need for an expanded analytical framework dictated that BEA not stop there. For example, BEA should ultimately go beyond simply counting government investment and depreciation to develop estimates of the service value of government capital.

There was widespread agreement on the need for improved measures (more market-based) of depreciation and capital stocks as well as for better integration of existing estimates--estimates of investment, saving, and wealth in BEA's accounts and in the Federal Reserve Board's the flow of funds accounts as well as estimates by BEA of capital stocks and those by the Bureau of Labor Statistics of capital stocks and capital services. Such integration and improvement in the accounts was deemed especially important given the shift in interest from shorter-term stabilization issues to longer-term issues dealing with productivity, growth, and competitiveness.

Session III: Filling Gaps in the Coverage of International Transactions

There was strong support for improving the measures of international transactions. The most widespread support was for better and more detailed measures of trade in goods and services, especially where new products, new markets, or new participants caused measurement difficulties in real and nominal estimates.

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With respect to capital flows and positions, there was consensus on general priorities in coverage but some difference about the kinds of data that should be assembled by BEA.

- The first priority was to fill gaps in the coverage of conventional financial instruments within portfolio investment. A lower priority was put on covering derivatives and other new financial instruments. (There was more interest in the services associated with these new instruments than in the flows and positions themselves.)
- There was some sentiment for more detailed and more timely capital account data for use in analysis of capital flows and risk. However, several participants felt assembling this data was better left to those concerned with monitoring the health of financial systems.

Section IV: Improving Statistics in a Resource-Constrained World

In general, the discussion focused on how BEA, and Federal statistical agencies in general, could operate more effectively. Several points echoed those made earlier in the day: Tapping into private sector data; more use of electronic data collection and interchange, and charging more for Federal data. With respect to the relations among the Federal statistical agencies, some participants urged closer cooperation, including data sharing; others believed that consolidation of the agencies was the preferred option. Suggestions were made by several participants and by the Vice Chairman of the Federal Reserve Board about statistical programs in other agencies that might be sacrificed to support work in services and other high-priority areas.

Refined Plan and Next Steps

Table 1 summarizes the final version of BEA's Mid-Decade Strategic Plan. In view of the consensus among users regarding the elements in the draft strategic plan, the final version differs little from the draft. As noted above, participants at BEA's conference mainly suggested differences in

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emphasis and priority to be placed on the various elements of the plan. In the area of output, for example, more prominence has been given to services; in investment, saving, and wealth, greater emphasis on expansion and improvement within the structure of the SNA; and in international transactions, higher priority to services and conventional financial transactions. However, given the general nature of the strategic plan, the priorities expressed by users are better seen in the steps laid out in the goals and milestones presented in table 2 and the description that follows of the steps to be taken in the next year. These steps are divided among the major areas outlined in the strategic plan.

New and improved measures of output

Real GDP.--This year in its comprehensive (benchmark) revision of the national income and product accounts, BEA will replace its fixed-weight index as the featured measure of real GDP with an index based on its chain-type annual weights index that BEA introduced in 1989 and began publishing in 1992 as a supplement to the fixed-weighted index. (BEA will also replace its fixed-weighted price index with a chain-based price index). Plans call for publication of the comprehensive benchmark at the end of 1995.

This chain-based index is superior in that it allows for changing relative prices and production patterns, and thus provides unbiased comparisons of economic activity over long periods of time. Because it allows for regular updating of output and price weights, the chain-based index also has the advantage of eliminating a major source of revisions in real GDP and price growth that occur as one updates fixed weights at 5-year or longer intervals.

In order to understand users analytical needs more completely and to brief users on the characteristics of the chain-based indexes, BEA will conduct a series of briefings on the tradeoffs among various alternative measures of real GDP for major user groups. In addition to these briefings, BEA will publish a series of articles in the Survey of Current Business, beginning in June, that describe the new measure of real GDP and other aspects

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of the comprehensive revision of the national income and product accounts. This summer, BEA will also expedite the release of its existing chain-type annual-weight index and begin including it in the regular GDP press release. Finally, immediately preceding the comprehensive revision, BEA will conduct further briefings for the press on the new featured measure.

Quality adjustment and definition of output.--BEA will seek to establish partnerships with users of the accounts, the Bureau of Labor Statistics and other federal agencies, and international organizations to develop coordinated work plans for developing new methods and concepts for measuring changes in output and prices in difficult to measure goods and services. For components of GDP that appear to be amenable to hedonic and other methods for separating price from quality change and for which adequate commercial data is available, BEA will work with its private and public partners to develop new output and price indexes. For difficult to measure services such as banking, insurance, financial and legal services, and management consulting services, BEA will work with its partners to develop new concepts and definitions.

Updating and filling gaps in services and other source data.--This year the Census Bureau began releasing data from the 1992 Economic Census, including data from those new service industries included for the first time. The expansion of the Census was the largest expansion in over 40 years and added over 90 new service industries. Incorporation of this data will significantly improve services coverage for BEA's input-output tables, and data from the transportation, communication, and public utilities collected as part of the Census services expansion will be used this fall in constructing the "make" table for the benchmark input-output table. Although further detailed data from the Census on the new service industries will be required to utilize these new data directly in the comprehensive revision of the national income and product accounts, BEA will explore means of utilizing the data that is currently available.

Beginning this fall the Economic Classification Policy Committee, which is comprised of BEA, the Census Bureau, and the Bureau of Labor Statistics,

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working with Canada and Mexico, will finalize its proposed North American Industry Classification System (NAICS) and present the proposed structure to users for comments. NAICS will provide an updated and more consistent classification system, particularly in the areas of services, new and emerging industries, and high-technology industries.

Better measure of investment, saving, and wealth

As part of its comprehensive revision of the national income and product accounts, BEA will move toward a more comprehensive and consistent treatment of investment and capital by moving to the SNA treatment of government purchases of structures and equipment as investment and by introducing better theoretically-based estimates of depreciation and capital stocks. These estimates will be the first steps in expanding and improving BEA's investment and capital stock estimates. Next steps will include further conceptual and empirical work on topics such investment in consumers durables, computer software, better empirically-based estimates of depreciation, and the services of government capital. BEA will also work on extending the concept of capital formation for investments such R&D and natural resources within the structure of the SNA's system of satellite accounts.

Filling gaps in the coverage of international transactions

Filling gaps in the coverage of services and other trade flows.--BEA will complete tabulation of its new benchmark survey of international trade in financial services and incorporate the results in June 1996 annual revision of the balance of payments accounts. BEA will also continue its work with the Census Bureau to develop market value estimates of the value of exports and imports of computer software.

Filling gaps in the coverage of capital flows and positions.--BEA will continue its coordinated work with other countries, international organizations, and the U.S. Treasury in improving capital flow and stocks estimates with special emphasis on the new benchmark survey of U.S. portfolio

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investment abroad, extension of existing data exchanges, and the development of measures and instruments for collecting data on new financial instruments.

Box

National Conference on the Economic Accounts

U.S. Chamber of Commerce
1615 H Street, N.W.
Washington, DC
March 21, 1995

Introductions (8:30 - 9:15)

- Welcoming Remarks, Richard L. Leshner, President, U.S. Chamber of Commerce
- Welcoming Remarks, The Honorable Ronald H. Brown, Secretary of Commerce
- Introduction, The Honorable Everett M. Ehrlich, Undersecretary of Commerce for Economic Affairs
- Overview of the Bureau of Economic Analysis Plan, Carol S. Carson, Director, BEA

Three pervasive issues that affect the economic accounts constitute priorities that our economic statistical system must address. They are: the need to develop new and improved measures of output; the need to update measures of investment, saving, and wealth; and the need to measure better the international flow of goods, services, income, and capital. The first three sessions of the program address in turn these three issues, focusing on the nature of the problem and commenting on the draft BEA plan (as presented in the February Survey of Current Business). The fourth session addresses how to "do more for less" by translating these issues into priorities for the statistical system.

I. The Need for New and Improved Output Measures (9:15 - 10:30)

Our economy's output is getting progressively harder to measure. This problem affects service sector outputs, technologically advanced products, or "products" such as financial derivatives. What steps should we take to address this problem and properly divide the nation's nominal expenditures between real output growth and price changes?

Overview: Joel Popkin, Joel Popkin and Associates
Panel Discussion
Chair: Allen Sinai, Lehman Brothers
Maurine Haver, Haver Analytics
Bruce Steinberg, Merrill Lynch
Group Discussion

II. Investment and the Capital Stock (10:45 - 12:00)

Good measures of the capital stock allow us to measure our wealth and the productivity with which we produce output. Measuring the capital stock requires methodological decisions regarding the role of intangible and public sector assets and the valuation of assets. What are the most pressing problems in this area and how should we address them?

Overview: Robert Eisner, Northwestern University
Panel Discussion
Chair: Michael Boskin, Stanford University
Barry Bosworth, Brookings Institution
Charles Hulten, University of Maryland
Group Discussion

Luncheon (12:15 - 1:30) Speaker: Alan Blinder, Federal Reserve Board

III. The U.S. Economy in Internationally Integrated Markets (1:45 - 3:00)

Increasing international economic integration creates issues for our measurements of goods, services, income, and capital flows. Trade in such relatively new areas as business services creates gaps in coverage in the national and international accounts. Thin coverage of capital flows leads to uncertainty about the economy's international position. What are the most important problems in these areas and what steps should we take to address them?

Overview: Edwin Truman, Federal Reserve Board

Panel Discussion

Chair: David Devlin, Citibank

John McLenaghan, International Monetary Fund

T. Fred Bergsten, Institute for International Economics

Group Discussion

IV. Improving Statistics in a Resource-Constrained World (3:15 - 4:15)

There's no such thing as a free lunch. In an era of stringent fiscal discipline, the statistical system must have a strong sense of priorities in order to maintain the effectiveness of its program spending. What are the most pressing priorities in the entire statistical system and in the BEA and Census programs that support the economic accounts? Which current programs may most merit reduced effort and, therefore, be a source of funding for other initiatives?

Panel Discussion

Chair: Joseph Duncan, Dun and Bradstreet

Janet Norwood, Urban Institute

Geoffrey Hewings, University of Illinois; Federal Reserve Bank of Chicago

Charles Waite, Consultant

Group Discussion

Summary and Closing (4:30 - 5:00)

BEA Reactions: Carol Carson

Closing Remarks: Everett Ehrlich

Table 1.--Issues and Proposed Actions

Issues, problems, and uses affected	Quantitative indicators (e.g., potential size of gap, size of revision, size of component treated differently or added)	Statistical source(s) of the problem	Proposed actions
The need for new and improved output measures			
<p>Difficulties in measuring and defining certain components of real GDP. <u>Uses affected:</u> Analysis of economic growth, especially of economy's long-term, noninflationary growth potential; macroeconomic policy; forecasting; business, budget, and investment planning.</p> <p>Revisions to key components of GDP and national income. <u>Uses affected:</u> Macroeconomic policy; forecasting; business, budget, and investment planning.</p>	<p>Possible understatement of growth, especially in fixed investment; potential for understatement in real GDP growth/1/</p> <p>No quantitative indicator of the difficulties of defining output</p> <p>1.4-9.4 percentage point (+/-) revisions to quarterly changes (SAAR) for key components of current-dollar GDP:/2/</p> <p>Change in business inventories, \$13 billion</p> <p>Trade in goods and services, \$9 billion</p> <p>Government purchases, \$8 billion</p> <p>Consumer expenditures for services, \$6 billion</p> <p>Consumer expenditures for goods, \$4-\$5 billion</p> <p>1.4-8.5 percentage point (+/-) revisions to quarterly changes (SAAR) for key components of national income</p>	<p>Difficulties in measuring quality changes, especially in investment goods</p> <p>Difficulties in defining output, especially in services</p> <p>Inability of existing source data used in the quarterly estimates to capture change in the economy</p> <p>Difficulties in seasonal adjustment.....</p> <p>Errors in projections for missing source data</p>	<p><u>Methodology and structure:</u> Extension of quality adjustment of prices used in real GDP, including hedonic work on goods amenable to such measurement: High-tech goods and nonresidential structures.</p> <p><u>Methodology and structure:</u> Further conceptual work on more difficult-to-measure services and goods.</p> <p><u>Data modification and extension:</u></p> <p>More frequent updating of sample frames for existing surveys, including trade and manufacturing.</p> <p>Data extension: More frequent surveys for certain growing sectors such as international trade in services, medical care services, and State and local government purchases.</p> <p>Data extension: Extension of existing surveys--such as those for services, inventories, and employee compensation (including bonus payments)--to fill gaps in coverage.</p> <p><u>Methodology and structure:</u> Improvements in seasonal adjustment for volatile components such as inventories and trade in goods and services.</p> <p><u>Methodology and structure:</u> Improvements in projections for components such as inventories, trade in goods and services, and bonus payments.</p>

Table 1.--Issues and Proposed Actions--continued

Issues, problems, and uses affected	Quantitative indicators (e.g., potential size of gap, size of revision, size of component treated differently or added)	Statistical source(s) of the problem	Proposed actions
<p>Overstatement of real GDP growth in recent years (and understatement in earlier years). <u>Uses affected:</u> Analysis of economic growth, especially of current growth relative to long-term, noninflationary growth; macroeconomic policy; forecasting; business, budget, and investment planning</p> <p>Outdated and inconsistent view of the structure and organization of production. <u>Uses affected:</u> Federal and State and local tax analysis and budget planning; business location and marketing studies; regional analysis; and industrial organization studies</p>	<p>0-1.2 percentage point overstatement of quarterly rates of change in real GDP (average since 1991:I-1994:III, 0.4 percentage point)/3/</p> <p>For industry classifications, inconsistencies across U.S. industries and incompatibilities among North American countries, with special attention needed for services, new and emerging industries, and high-tech industries (for a discussion of quantitative indicators, see text).</p>	<p>Substitution bias, specifically the use of fixed weights (1987) inappropriate for the current period</p> <p>Outdated and inconsistent industry classification system, source data, and industry accounts</p>	<p><u>Methodology and structure:</u> Introduction of more current weights for real GDP for current estimates and more appropriate weights for historical estimates.</p> <p><u>Methodology and structure:</u> Develop a new industrial classification system.</p> <p><u>Data modification and extension:</u> Implement a new industrial classification system, starting with a restructuring of survey forms.</p> <p><u>Methodology and structure:</u> Update and better integrate the input-output, industry, gross state product, and GDP estimates within the context of modernizing the accounts along the lines of the new international guidelines.</p>
The need for better measures of investment, savings, and wealth			

Table 1.--Issues and Proposed Actions--continued

Issues, problems, and uses affected	Quantitative indicators (e.g., potential size of gap, size of revision, size of component treated differently or added)	Statistical source(s) of the problem	Proposed actions
<p>Extend the concept and update the measurement of investment and wealth/capital stock. <u>Uses affected:</u> Analysis of sources of economic growth, productivity, returns to public and private investment; tax and expenditures policies</p> <p>Need for better integration and measurement of investment, saving, and wealth/capital stocks. <u>Uses affected:</u> Analysis of sources of economic growth, productivity, returns to public and investment, and saving; tax and expenditure policies.</p>	<p>Treating government spending on structures and equipment and government and business spending on computer software as fixed investment would raise investment and reproducible capital stock in national wealth by about 20 percent</p> <p>Government capital, \$2,863 billion.</p> <p>Computer software, \$20-\$40 billion.</p> <p>Treating other candidates as investment in satellite accounts would raise wealth/capital stock, for example:</p> <p>R&D capital, \$1,050-\$1,380 billion</p> <p>Natural resources, \$950-\$1,600 billion</p> <p>No quantitative indicator of the need to update measurement</p> <p>3 to 9 percentage point differences-- conceptual and statistical-- between NIPA and flow of funds measures of personal saving rates/4/</p> <p>Treating government "investment" in GDP consistently with international guidelines would eliminate more than half of the apparent 5.8 percentage point shortfall in U.S. versus European investment rates:/5/</p> <p>NIPA rate is 13.7 percent; adding government "investment" raises the rate to 16.7 percent.</p> <p>Average rate for Europe is 19.5 percent.</p>	<p>Exclusion of certain types of public and private expenditures that contribute to the nation's wealth and productive capacity</p> <p>Use of straight-line depreciation.....</p> <p>Lack of complete integration between financial and real accounts</p>	<p><u>Methodology and structure:</u> Expand the accounting for investment and wealth/capital stock by (1) inclusion of government spending on structures and equipment and government and business spending on computer software and other intangibles in investment in the national accounts and (2) inclusion of research and development and natural resources in satellite accounts, in line with the new international economic accounts guidelines.</p> <p>Use of an improved theoretical basis for depreciation patterns and valuation methods.</p> <p><u>Methodology and structure:</u> Better integration of real and financial accounts in the context of modernizing the accounts line with the new international economic accounting guidelines. For 1993, investment as a percent of GDP.</p>
The need to fill gaps in the coverage of international transactions			

Table 1.--Issues and Proposed Actions--continued

Issues, problems, and uses affected	Quantitative indicators (e.g., potential size of gap, size of revision, size of component treated differently or added)	Statistical source(s) of the problem	Proposed actions
<p>Gaps in the coverage of international trade in certain goods and services, income, and capital.</p> <p><u>Uses affected:</u> Analysis of trade, monetary, and regulatory policy; forecasting; business and investment planning</p>	<p>Gaps in key components:</p> <p>Trade in goods and services, as much as \$10 to \$20 billion/6/</p> <p>Capital flows, as much as \$100, and stocks as much as \$200 billion/6/</p>	<p>Inability of existing data collection methods to capture new markets and types of goods, services, and financial instruments and intermediaries</p>	<p><u>Data modification and extension:</u> Extension of existing surveys to cover new products, services, and markets.</p> <p><u>Methodology and structure:</u> Extension of data exchanges with other countries and central banks.</p> <p><u>New data:</u> Development of new surveys such as for financial services and portfolio investment.</p>

1. For a discussion of quantitative indicators, see text.
2. Based on BEA revision studies; see text for details.
3. Based on BEA alternative output and price indexes; see text for details.
4. Based on historical difference between BEA's NIPA measures and the Federal Reserve Board's flow-of-funds estimates; most of the difference between the two series are conceptual, with statistical differences ranging between 0 and 2.9 percentage points over the last 10 years.
5. Calculated from Quarterly National Accounts, compiled by the Organisation for Economic Co-operation and Development. "Europe" includes the 13 countries for which data were published.
6. Based on indicator series and past revisions for similar components.

Table 2.--Proposed Actions and Milestones in Implementation

Proposed actions	Milestones in implementation				
	1995	1996	1997	1998	1999
Need for new and improved output measures					
Extension of quality adjustment of prices used in real GDP	Establish partnerships to expand work on quality adjustment	Continue partnerships and begin to publish quality-adjusted measures for selected high-tech products	Develop new estimates for nonresidential construction using model pricing or hedonic methods	Continue work on extension of quality adjustments	
Further conceptual work on difficult-to-measure services and goods	Establish partnerships to expand conceptual work	Continue work on new concepts and methods for measuring banking, insurance, and other financial services	Publish new estimates for banking, insurance, and other financial services	Identify and develop new concepts and methods for measuring other difficult-to-measure services and goods	Publish new estimates for other difficult-to-measure services and goods
More frequent updating of sample frames for existing surveys, more frequent surveys for services and other sectors, and extension of existing surveys to fill gaps in coverage	Begin to utilize results from the services expansion of the Census Begin work with other agencies to identify cost-effective actions	Continue work, extending consultations to business community	Conduct new and revised surveys using new sample frames and methods	Incorporate data from new and revised surveys	
Improvements in seasonal adjustments	....	Begin work with other agencies on improving seasonal adjustment Begin work on revised seasonal adjustment as part of re-engineering	Incorporate revised seasonal adjustment methods for categories such as inventories and merchandise trade	Incorporate revised seasonal adjustment methods for other key components	
Improvements in projections for missing source data	....	Begin design work for built-in analytics and projections methods as part of re-engineering	Incorporate new methods into current quarter projections for categories such as inventories and merchandise trade	Incorporate improved methods into current quarter projections for other key components	
Introduction of new weighting schemes	Introduce more current weights for real GDP	....	....	....	Update base-year weights for current estimates
Develop a new industry classification system	Present NAICS priority categories, including services, to industry groups and data users for comment and revision	Continue work with industry groups and data users and finalize NAICS in time for 1997 Economic Censuses	Work with Census to redesign forms on the basis of NAICS		
Update and better integrate BEA's accounts within the context of new international guidelines	....	....	Complete the 1992 benchmark input-output accounts 5 years after the reference year		
Need for better measures of investment, saving, and wealth					

Table 2.--Proposed Actions and Milestones in Implementation--Continued

Proposed actions	Milestones in implementation				
	1995	1996	1997	1998	1999
Expand the coverage of investment along the lines of new international guidelines	Treat government spending on structures and equipment as investment	Publish new estimates of computer software Update and improve estimates of research and development in the satellite account Extend integrated economic and environmental satellite accounts (IEESA's) to include selected renewable resource estimates and revise nonrenewable resource estimates	Continue long-term improvements in computer software and work on other intangibles Expand disaggregation of existing NIPA items in the IEESA's		
Use of improved depreciation and valuation methods	Introduce new depreciation and capital estimates	Extend empirical work on used asset prices to other assets	Expand empirical work on used asset prices to other assets		
Integration of real and financial accounts	Begin work with the Federal Reserve Board to develop multiyear plan for better integration				
Need to fill gaps in the coverage of international transactions					
Extension and revision of existing surveys and forms to cover new services, products, and financial instruments	Revise product code and data collection to include a separate category for computer software Begin work with Treasury and the Federal Reserve on cost-effective means of collecting data on derivatives and new financial instruments	Develop initial estimates of the full market value of computer software based on revised methods and source data Work with the business community to develop revised and extended "selected services" survey to cover new, growing, and volatile services categories Work with the business community to develop a revised survey to cover derivatives and new financial instruments	Update and improve estimates of the full market value of computer software Conduct extended services surveys Conduct revised survey to capture derivatives and new financial instruments	Process and incorporate results from extended surveys into national and international accounts Process and incorporate results from new derivatives survey into national and international accounts	

Table 2.--Proposed Actions and Milestones in Implementation--Continued

Proposed actions	Milestones in implementation				
	1995	1996	1997	1998	1999
Extension of data exchanges with other countries and central banks	Continue work on internationally coordinated definitions for data exchanges	Incorporate data, as appropriate, from countries adopting new standardized definitions	Incorporate data, as appropriate, from countries adopting new standardized definitions	Incorporate data, as appropriate, from countries adopting new standardized definitions	Incorporate data, as appropriate, from countries adopting new standardized definitions
Development of new surveys	<p>....</p> <p>Process new benchmark survey of U.S. portfolio investment abroad</p> <p>Continue international coordination in development of international benchmark survey of portfolio investment</p>	<p>Incorporate results from benchmark financial services survey and conduct annual financial services survey</p> <p>Continue processing new benchmark survey of U.S. portfolio investment abroad</p> <p>Continue international coordination in development of international benchmark survey</p>	<p>Incorporate results from annual financial services survey</p> <p>Incorporate results from new benchmark survey of U.S. portfolio investment abroad</p> <p>Finalize design and collection of internationally coordinated benchmark survey</p>	<p>Collect and process data from internationally coordinated benchmark survey</p>	<p>Continue processing results of internationally coordinated benchmark survey</p>